

REMARKS

This is in response to the Office Action dated December 20, 2004. Non-elected claims 22-23 have been canceled, without prejudice, in view of the Restriction Requirement. Claims 14, 16 and 21 have also been canceled. Thus, claims 1-13, 15, 17-20 and 24 are now pending.

Claim 1 stands rejected under 35 U.S.C. Section 102(b) as being allegedly anticipated by Lingle (US 2002/0064662). This Section 102(b) rejection is respectfully traversed for at least the following reasons.

Claim 1 as amended requires "a layer comprising tin oxide provided on and contacting a surface of the glass substrate; a layer comprising silicon nitride provided on and contacting the layer comprising tin oxide; an infrared (IR) reflecting layer located on the substrate over the layer comprising tin oxide and over the layer comprising silicon nitride, wherein the IR reflecting layer comprises one or more of NiCr, Cr, Nb, and NbZr, and wherein the coated article has no infrared (IR) reflecting layer comprising significant amounts of Ag or Au." In other words, the IR reflecting layer cannot be a silver layer. For example, see Fig. 1 of the instant application which illustrates glass/SnO₂/Si_xN_y/IR refl/dielectric. The cited art fails to disclose or suggest the aforesaid features of claim 1.

Lingle (US 2002/0064662) discloses a double-silver low-E coating, where the IR reflecting is performed by first and second silver based layers. There is no disclosure or mention in Lingle '662 of an IR reflecting layer comprising one or more of NiCr, Cr, Nb, and/or NbZr as required by claim 1. Moreover, claim 1 expressly excludes the low-E coating of Lingle '662 because claim 1 states that the coated article has no infrared (IR) reflecting layer comprising significant amounts of Ag or Au. Thus, it is respectfully submitted that claim 1 as amended patentably defines over Lingle '662.

Moreover, with respect to the rejection set forth in paragraph 9 of the Office Action, one of ordinary skill in the art would never have added a tin oxide layer to the coating of Lingle '585 between the NiCr and silicon nitride layers. The purpose and goal of Lingle '585 is to realize a coating with low ΔE characteristics (i.e., color does not change too much upon heat treatment). The addition of a tin oxide layer immediately under the NiCr would defeat this purpose/goal, and would cause the ΔE characteristics of the coating to rise beyond the range desired in the '585 Patent (the oxygen from the tin oxide would affect the immediately adjacent silver and cause ΔE to rise more upon heat treatment). Thus, one of ordinary skill in the art would never have done this, because it would defeat the goal and object (low ΔE) of Lingle '585's invention. Lingle '585 teaches directly away from such a modification.

Claims 15 and 24 also require that "the IR reflecting layer comprises one or more of NiCr, Cr, Nb, and NbZr, and wherein the coated article has no infrared (IR) reflecting layer comprising significant amounts of Ag or Au." Lingle '662 fails to disclose or suggest this as discussed above.

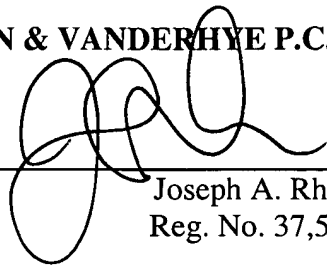
It is respectfully requested that all rejections be withdrawn. All claims are in condition for allowance. If any minor matter remains to be resolved, the Examiner is invited to telephone the undersigned with regard to the same.

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Respectfully submitted,

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